



BSI Standards Publication

Surface active agents — Bio-based surfactants — Requirements and test methods

National foreword

This British Standard is the UK implementation of EN 17035:2021. It supersedes PD CEN/TS 17035:2017, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CII/34, Methods of test for surface active agents.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

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English Version

Surface active agents - Bio-based surfactants - Requirements and test methods

Agents de surface - Tensioactifs biosourcés - Exigences
et méthodes d'essais

Grenzflächenaktive Stoffe - Bio-basierte Tenside -
Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 8 June 2020.

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European foreword

This document (EN 17035:2021) has been prepared by Technical Committee CEN/TC 276 “Surface active agents”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2022, and conflicting national standards shall be withdrawn at the latest by March 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TS 17035:2017.

The new edition integrates the recommendations for sub-sampling procedure and clarifies the procedure to analyse bio-based content for not pure compound and in an aqueous solution.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document has been prepared under Mandate M/491 [12] of the European Commission, addressed to CEN for the development of European standards for solvents and surfactants in relation to bio-based product aspects. It has been prepared by CEN/TC 276/WG 3 “Bio-surfactants”, the secretariat of which is held by AFNOR.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Bio-based raw materials have been used for millennia in the manufacture of surfactants, e.g. the first surfactant used by mankind, was already completely bio-based – soap. With the advent of modern surfactants in the early 20th Century, petrochemical-based raw materials also became of interest. They offered the opportunity to tune the surfactant properties, in a broader sense, to their various applications.

The last decades have seen the emergence of new bio-based raw materials for surfactants. Some of the reasons for the increased interest lie in the bio-based products' potential benefits in relation to the depletion of fossil resources and climate change.

Acknowledging the need for common standards for bio-based products, the European Commission issued Mandate M/492¹⁾, resulting in a series of standards developed by CEN/TC 411, with a focus on bio-based products other than food, feed and biomass for energy applications.

The standards of CEN/TC 411 “Bio-based products” provide a common basis on the following aspects:

- common terminology²⁾;
- bio-based content determination;
- Life Cycle Assessment (LCA)³⁾;
- sustainability aspects⁴⁾;
- declaration tools.

It is important to understand what the term “bio-based product” covers and how it is being used. The term “bio-based” means “derived wholly or partly from biomass”. It is essential to characterize the amount of biomass contained in the product by, for instance, its (total) bio-based content or bio-based carbon content.

The bio-based content of a product itself does not provide information on its environmental impact or sustainability, which may be assessed through Life Cycle Inventory (LCI), LCA and sustainability criteria. In addition, transparent and unambiguous communication within bio-based value chains is facilitated by a harmonized framework for certification and declaration.

Breaking down the horizontal standards to bio-based products like bio-based surfactants, the European Commission issued Mandate M/491 [12], resulting in standards developed by CEN/TC 276. This document has been developed with the aim to fulfil part of the Mandate to describe the technical requirements of bio-based surfactants. The criteria for “bio-based surfactants” published in this document are complementary to the horizontal standards by CEN/TC 411.

1) A mandate is a standardization task embedded in European trade laws. The M/492 Mandate is addressed to the European standardization bodies, i.e. CEN, CENELEC and ETSI, for the development of horizontal European standards for bio-based products. The M/491 Mandate is addressed to the development of European standards for bio-solvents and bio-surfactants.

2) EN 16575.
3) EN 16760.
4) EN 16751.